

## Indefinite Integration - Homework

1.  $\int -9 \, dx$

2.  $\int -5x \, dx$

3.  $\int (6+2x) \, dx$

4.  $\int x^7 \, dx$

5.  $\int (x^4 + x^3 - x^2) \, dx$

6.  $\int (3x^3 - 4x^2) \, dx$

7.  $\int \left( \frac{2}{3}x^5 - \frac{5}{2}x + \frac{1}{2} \right) dx$

8.  $\int \left( \frac{3}{x^4} \right) dx$

9.  $\int \left( 2 - \frac{1}{x^5} + \frac{7}{x^3} \right) dx$

10.  $\int 5\sqrt{x} \, dx$

11.  $\int 5(\sqrt[5]{x}) \, dx$

12.  $\int \left( x^{3/4} - \frac{1}{x^{3/4}} \right) dx$

13.  $\int 3\sqrt[3]{x^2} \, dx$

14.  $\int (x-5)^2 \, dx$

15.  $\int 4(3x-2)^3 \, dx$

16.  $\int \frac{x^3 - 4x - 1}{2x^3} \, dx$

17.  $\int t^2(3+t)^2 \, dt$

18.  $\int \frac{(3x-2)^2}{\sqrt{x}} \, dx$